University of Tripoli
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HTML5 CONCLUSION
SEMANTIC ELEMENTS & VALIDATION
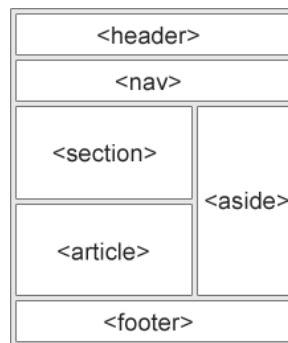
Introduction to Internet Programming
ITGS 226 -- F 2021

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SEMANTIC ELEMENTS

- <header>
- <nav>
- <section>
- <article>
- <aside>
- <footer>

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SEMANTIC ELEMENT: <HEADER>

- The <header> element represents a container for introductory content or a set of navigational links.
- A <header> element typically contains:
  - one or more heading elements (<h1> - <h6>)
  - logo or icon
  - Authorship information
- It is a Block element that may contain block or inline or text content.
- No <footer> or another <header> element as ancestors or descendants

```
<header>
      <h1>Tutorial Republic</h1>
      <nav>
             <p><a href="#">Home</a> |
                <a href="#">About</a> |
                <a href="#">Contact</a> </p>
      </nav>
</header>
```

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SEMANTIC ELEMEN: <NAV>

- The <nav> element defines a section of navigation links (i.e. links to other pages or to parts within the page itself) in a document.
- It is a Block element that may contain block or inline or text content.

```
<nav>
      <ul>
             <li><a href="#">Home</a></li>
             <li><a href="#">About</a></li>
             <li><a href="#">Contact</a></li>
      </ul>
</nav>
```

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SEMANTIC ELEMENT: <SECTION>

- The <section> element defines a section in a document.
- Examples of where a <section> element can be used:
  - Chapters
  - Introduction
  - News items
  - Contact information
- A web page could normally be split into sections for introduction, content, and contact information.
- It is a Block element that may contain block or inline or text content.

```
<section>
    <h1>Welcome to Our Website</h1>
    <p>Welcome and thank you. </p>
</section>
```

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SEMANTIC ELEMENT: <ARTICLE>

- The <article> element specifies independent, self-contained content.
- An article should make sense on its own, and it should be possible to distribute it independently from the rest of the web site.
- Examples of where the <article> element can be used:
  - Forum posts
  - Blog posts
  - User comments
  - Newspaper articles
- It is a Block element that may contain block or inline or text content.

```
<article>
    <h1>Introduction to HTML</h1>
    <p>HTML is a markup language.</p>
</article>
```

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SEMANTIC ELEMENT: <ASIDE>

- The <aside> element defines some content aside from the content it is placed in (like a sidebar).
- The <aside> content should be indirectly related to the surrounding content.
- It is a Block element that may contain block or inline or text content.

```
<aside>
      <h1>Apollo 13 Facts</h1>
      <p>Apollo 13 was the seventh manned mission in
      the American Apollo space program and the third
      intended to land on the Moon.</p>
</aside>
```

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SEMANTIC ELEMENT: <FOOTER>

- The <footer> element defines a footer for a document or section.
- A <footer> element typically contains:
  - copyright information
  - contact information
  - back to top links
  - related documents
- You can have several <footer> elements in one document.
- It is a Block element that may contain block or inline or text content, but no <footer> or <header>.

```
<footer>
      <nav>
              <p><a href="#">Terms of Use</a> |
                <a href="#">Privacy Policy</a>
              </p>
      </nav>
      <p>Copyright © 2014 Tutorial Republic</p>
</footer>
```

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NON-SEMANTIC ELEMENTS

- <div>
- <span>

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NON-SEMANTIC ELEMENT: <DIV>

- The <div> (short for *division*) tag is generic container for flow content, which has no default rendering or meaning.
- The <div> tag is extensively used to define the structural sections of a document and to layout a web page using CSS.
- It is a Block element that may contain block or inline or text content.

```
<div class="welcome-box">
      <h1>Welcome</h1>
      <p>Hi, welcome to our website.</p>
</div>
```

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NON-SEMANTIC ELEMENT: <SPAN>

- The <span> tag is generic inline container for phrasing content, which has no default rendering or meaning.
- The <span> tag is extensively used to define the structural sections of a document and to layout a web page using CSS.
- It is a Inline element that may contain inline or text content.

```
<p>Here is some
     <span style="color:red;"> different </span>
 text.</p>

<p>Read the
     <span class="important"> Notes </span>
carefully.</p>
```

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NON-SEMANTIC ELEMENT: <SPAN>

- The <span> tag is generic inline container for phrasing content, which has no default rendering or meaning.
- The <span> tag is extensively used to define the structural sections of a document and to layout a web page using CSS.
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<p>Here is some
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 text.</p>

<p>Read the
     <span class="important"> Notes </span>
carefully.</p>
```

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HTML5 VALIDATION

- The World Wide Web Consortium provide a simple online tool (https://validator.w3.org/) that automatically check your HTML code and point out any problems/errors your code might have, such as missing closing tags or missing quotes around attributes.

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THE END

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